# A REPORT

UPON THE

# Public Health of the Borough of Great Yarmouth, FOR THE YEAR 1886.

COMPRISING SOME PARTICULARS OF

ITS POPULATION, VITAL STATISTICS, CAUSES OF DEATH & LOCALITIES OF ZYMOTICS;

TOGETHER WITH

The Numbers and Characters of the various Nuisances abated, and a short account of the more

# IMPORTANT SANITARY MATTERS,

DEALT WITH BY THE U.S.A. BY

JOHN BATELY, M.D., L.R.C.P., Lond., &c.

Medical Officer of Health and Medical Superintendent of the Urban Sanitary Authority's Infectious Diseases Hospital.

Printed by Order of the Sanitary Committee of the Corporation.

#### Great Narmouth:

J. Buckle, Steam Printer, 36, King Street. 1887.

#### ENGLAND AND WALES DURING 1886.

Population estimated to	the middl	e of th	e year	27,870,586
Registered Births	• •	• •	• •	903,216
" Deaths		• •	• •	537,078
Annual Rate of Births	per 1,000	of the	popu-	
lation	• •	• •	• •	32.4
Annual Rate of Deaths	per 1,000	of the	popu-	
lation			• •	19.3
Excess of Births over I	Deaths		• •	366,138
Estimated increase of po	pulation	• •		374,055
Emigrants—English and	d Welsh		• •	149,005

The mean annual death-rate in the first six years of the current decennium (1881-90) did not exceed 19·3, and was 2·1 below the mean rate in the preceding ten years, 1871-80. This reduction in the death-rate implies that more than 339,000 persons in England and Wales were alive at the end of those six years, whose deaths would have been recorded had the mean rate of mortality equalled that which prevailed throughout the ten years 1871-80.

The deaths from Small pox last year (284) were considerably fewer than in any previous year of which record exists.

Registrar General's Report.



# REPORT.

# TO THE GREAT YARMOUTH URBAN SANITARY AUTHORITY.

GENTLEMEN,

I respectfully beg to tender you the following as my report upon the health of the Borough for the year 1886.

It embraces the fifty-two weeks ending January 1st, 1887, and I regret the figures I give below, in relation to that period, show a larger mortality than we have in recent years been accustomed to.

On the 30th of last June there was probably a population of 48,519 persons resident in Great Yarmouth, and by the end of the year these figures had swollen to 48,738. A very large number of new houses have been erected in the borough since 1881, the Surveyor says at least a thousand, and as building operations tend to develop rather than slacken, I think there is reason to assume our population may in reality be somewhat larger than the above estimate. However, we are on the safe side in considering our increase no more during this decade than was found in 1881 to have obtained in the previous ten years.

There were registered within the borough, during the period mentioned in the second paragraph—

1,702 BIRTHS and 1,087 DEATHS.

These figures applied to the estimated population for the middle of last year give the following results:—

35.07 per 1,000 as the BIRTH RATE. 22.40 ,, ,, DEATH RATE.

Included in the above figures are 99 births and 34 deaths, under one year, of Illegitimate infants. About one birth in seventeen is that of shame and dishonour. However distressing this fact may be, the rate at which babes of this class die is even more so. Not quite two-thirds of them survived the year, or, in other words, they died at the rate of 34.3 per cent., whilst those born in wedlock died at the rate of 21.0 per cent.

The destruction of infant life in Yarmouth is truly alarming. Forty-three per cent. of all the deaths last year were those of babes and children under five years of age.

I have referred to this serious mortality in several of my former reports, and, with reference to the illegitimate children especially, suggested an arrangement for registration and inspection, which, if acted upon, might do something to improve matters. I again commend those suggestions to your consideration.

In common with the rest of the country, Yarmouth has suffered for some time past from the depression of trade, and during the winter months especially a large number of workmen and artizans stand idle. Beyond the fishing industry, and a small coasting trade, very little use is made of this port. The busiest time in the whole year is during the herring season, which begins in August and ends with November. In fact, were it not for the fish trade, commercially, Yarmouth would be extinguished. Such precarious employment for the working classes must have a correspondingly depressing effect upon their healths. Frequently poorly fed, and scantily clothed, they and their families,

especially those members of them who are young and delicate, suffer acutely; and without, perhaps, positively starving, become enfeebled in health, which in too many instances results in premature death. Prosperity means better health and a lighter death-rate; therefore the promotion of public works, to give employmment to those needing it should, I think, be regarded rather from considerations for the public health than a matter of charity to the men themselves.

For the purpose of comparison I give below certain vital statistics relating to other towns, as well as Yarmouth, taken from the Registrar-General's annual summary for last year. As I confine my calculations to the Borough of Great Yarmouth, whilst the Registrar-General takes in the outlying rural parishes included in the Gorleston registration district, my figures more nearly represent the truth as it affects this borough than his, and hence the small discrepancies between the results we arrived at.

LOCALITY.	Estimated Population middle 1886.	Birth Rate.	Death Rate.	Zymotic Death Rate.
ENGLAND AND WALES	27,870,586	32.4	19.3	2.26
FIFTY URBAN DISTRICTS	2,832,638	33.6	19.9	2.52
DARLINGTON	44,006	30.1	15.4	1.77
CHELTENHAM	45,089	24.7	17.4	0.86
DUDLEY	47,599	38.0	19.7	3.36
COVENTRY	47,988	30.8	20.7	3.50
WARRINGTON	48,319	37.3	19.0	2.17
DEVONPORT	48,939	34.3	20.4	1.43
BURTON-ON-TRENT	49,745	32.5	15.2	1.83
TYNEMOUTH	49,758	33.0	19.3	1:53
Chester	49,820	29.7	18.5	1.28
READING	50,009	30.3	16.9	1.58
LINCOLN	50,314	29.3	19.4	3.46
BARROW-IN-FURNESS	50,984	35.6	15.2	2.73
YARMOUTH	51,072	34.6	21.7	3.39
Oxford	51,104	29.2	18.6	1.15
YSTRADYFODWG ,	52,919	44.5	26.3	5.37
Ватн	53,983	23.4	19.1	1.33
HASTINGS	54,218	22.4	14.8	1.57
IPSWICH	54,757	33 6	19.1	1.73
SOUTHAMPTON	55,780	30.0	18.0	1.11

The total number of deaths, referred last year to the principal Zymotic diseases, amounted to 171, which I calculate as equivalent to a mortality of 3.52 per 1,000 persons living. Had not these infectious, and to a large extent preventable, deaths occurred, our gross death-rate last year would have been 18.88 only, thus evidencing very forcibly the scope hygienic effort has in this borough. And to render more distinctly apparent our present healthiness, or rather lack of it, as compared with what it has been, I subjoin the cardinal figures relating to last year in contrast with the previous decennial averages.

	Births.	Rate.	Deaths.	Rate.	Zymotic Deaths.	Rate.
During 1886  Average of ten	1702 1561	35·07 32·93	1087	22·40 19·70	171 124	3·52 2·69
years, 1876-85	1501	02 00	904	13 70	124	2 00

The table on pages 8 and 9 is in accordance with the Local Government Board's directions, and exhibits many particulars of the mortality of your sanitary district during 1886. I have supplemented it by giving the totals of like particulars for several years past, so that comparison of the various years may be made.

The seasons last year were very trying, and undoubtedly had a considerable influence on the mortality, which I regret to say attained the highest figure I have yet recorded. The commencement of the year brought us a long and dreary winter, followed by a cold, cheerless spring. During the early part of the summer matters showed little tendency to improve, but as the season progressed short bursts of intense heat were experienced from time to time, and in this desultory manner the summer lingered on till the commencement of

October. The autumn months were as mild as the spring was cold, and about the middle of October a violent gale swept over the western and southern parts of the kingdom. The chief events of the year were, however, reserved for the closing month, when storm, frost, and flood did their utmost to show that old-fashioned winters are not altogether things of the past. Had the weather been more genial, and without so many extremes, there would in all likelihood have been fewer deaths from diseases of the respiratory organs, and many a feeble and aged one preserved to us who now, alas, are with "the majority."

The localities in which zymotic deaths occurred last year were as under:—

#### Those from MEASLES-

Middle Market RoadSay's CornerRow  $8\frac{1}{2}$  (2)North QuayPaget's YardTower StreetRow 109King StreetRew 116Southtown RoadRodney Road

#### Those from Scarlet Fever-

Middlegate Street Militia Depôt Frank's Buildings, Southtown Queen's Place, Southtown Trafalgar Road, Gorleston Infectious Diseases Hospital Cemetery Road Caister Road St. Nicholas' Terrace King Street Military Place Yaxley's Square Victoria Road Grosvenor Road Camden Town Howard Street South Jury Street Tower Road

#### Those from DIPHTHERIA-

St. Mary's Terrace, Southtown Row 135 Say's Corner

## TABLE OF

During the year 1886, in the Urban Sanitary District of Great LOCALITIES, and showing also the Population of

	Populati Ag	on of all ges.		M	ortalit	y from	n all	causes ges.	s, at s	ub-
Names of Localities adopted for the purposes of these Statistics.	.c Census 1881.	Estimated to middle of 1886.	A Registered Births.	er At all ages.	9 Under 1 year.	1 and under 5.	∞ 5 and under 15.	.c 15 and under 25.	.0 25 and under 60.	. 60 and upwards.
NORTH DISTRICT	20,612	21,112	730	515	152	49	11	22	104	177
South District	16,601	17,175	595	361	116	38	12	12	85	98
Gorleston & Southtown	9,001	10,232	377	211	80	36	2	8	32	53
Totals	46,214	48,519	1702	1087	348	123	25	42	221	328
					·					
1885—Estimated to middle year	of }	48,081	1,600	915	222	102	39	46	233	273
1884 ,, ,,	••	47,640	1,683	1017	301	133	43	43	233	264
1883 ,, ,,	• •	47,202	1,564	904	232	86	35	41	206	304
1882 ,, ,,	• •	46,762	1,525	953	267	143	37	40	199	267
1881—Per Census	• •	46,214	1,580	889	245	108	30	37	219	250
1880—Corrected Estimate	• •	45,775	1,561	959	293	121	40	31	209	265
1879 ., ,,	• •	45,335	1,568	830	213	89	45	32	213	238
1878 ,, ,,	• •	44,896	1,553	1057	305	137	27	35	243	310
1877 ,, ,,	• •	44,456	1,490	900	283	97	21	41	211	244

# DEATHS.

Yarmouth, classified according to DISEASES, AGE, and such Localities, and the Births therein during the year.

Mortality from subjoined causes, distinguishing Deaths of Children under Five Years of age.																					
12.	Smallpox.	. Measles.	.c. Searlatina.	.91 Diphtheria.	Croup (not spasmodie")	8 Whooping Cough	Con snydAL 19	Typhoid.	1	and ry.	Cholera.	Rheumatie Fever	52. Erysipelas.	Pyamia.	2 Puerperal Fever.	.enge 28.	.65 Phthisis.	Bronchitis, Pheu.	12 Heart Disease.	35. Injuries.	All other Diseases
Under 5 5 upwds	_	7 0	4 2	1 0	2 0	4 0	_	0 9	_	46	_	_	1 0	_	0 2		0 27	25 55	0 24	2 13	109 179
Under 5 5 upwds	_	3	7 2	0	1 0	4 0	<u> </u>	0 4	_ _	38 2	_	2 3	$\begin{array}{c} 0 \\ 2 \end{array}$	_	_ _	-  -	0 16	16 36	1 19	4 6	78 115
Under 5 5 upwds	_	1 0	3 0	1 0	$\begin{bmatrix} 2 \\ 0 \end{bmatrix}$	20 0	_	0	0	5 1	_	=	$\begin{array}{c} 0 \\ 2 \end{array}$		_ _	_	2 11	13 11	0 6	6 4	63 58
Under 5 5 upwds	_	11	14	2	5 0	28	=	0 14	0	89		2 3	1 4		0 2	_	$\frac{2}{54}$	54 102	1 49	12 23	$\frac{-}{250}$
		1	1	(	1						1								,		
Under 5 5 upwds	_	6	8	7	6	5 0	_ _	$\frac{2}{42}$	0 2	32 4	_	0 2	2 6	0 1	0	_	$\frac{2}{72}$	50 83	$\frac{2}{56}$	6 22	196 292
Under 5 5 upwds	0 1	31 3	0	10 4	17 6	19 0	_ _	0 18	0	62 2	4 2	0 5	3 4	_	0 2	_	3 68	66 70	0 69	1 24	221 300
Under 5 5 upwds	_	_	$\frac{1}{2}$	3 2	$\begin{bmatrix} 21 \\ 7 \end{bmatrix}$	9	_	1 6	1 0	35 6	=	 	$\frac{1}{2}$	_	_	<u>-</u>	2 67	45 74	0 51	3 31	197 <b>33</b> 7
Under 5 5 upwds	_	17 1	6	0	$\frac{4}{2}$	16 0	_	1 8	_	78 5	_	1 2	0 11	_	0 4	_ _	5 57	83 56	0 59		198 308
Under 5 5 upwds	1 5	16 1	15 6	$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$	3 2	4	-	$\begin{bmatrix} 2 \\ 7 \end{bmatrix}$	1	46	_	0 1	9	2 3	9	_	0 59	65 69	0 46		$\frac{194}{278}$
Under 5 5 upwds	_	3	30 11	3 5	11 2	14 0	_	$\begin{bmatrix} 1 \\ 6 \end{bmatrix}$	0	89 9	_	0	1	_	$\begin{bmatrix} 0 \\ 2 \end{bmatrix}$	_	6 66	58 70	1 47	5 34	197 281
Under 5 i upwds	-	7 0	9 8	3 4	6	6	_	2 4	0 4	26 6	_	$\begin{array}{c} 0 \\ 2 \end{array}$	$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$	0 1	0	_	2 73	55 43	0 48	5 31	181 298
Under 5 5 upwds	_	18	9	2 1	8 2	$\begin{array}{c} 25 \\ 0 \end{array}$	_	2 9	3 2	66	1 0	0 8	2 3	0 2	_	_	12 87	74 83	0 58		213 333
Uuder 5 5 upwds	-	4 1	6 1	_	4 0	6	0 1	110	1 5	75 9	=	0 3	0 4	0 3	0 3	_	3 77	78 62	0 60		212 265

### THOSE from WHOOPING COUGH-

Garden Lane	Bell's Road, Gorleston
Admiralty Road	Nile Road ,, (2)
Row 117	Cliff Hill ,, (2)
Row 113	Teasdel's Buildings, Gorleston
Workhouse	Beach Road ,,
Priory Plain	Blackwall Reach ,,
Row 45	High Street ,,
Rainbow Corner	Cliff Farm ,,
Middlegate Street	Pier Plain ,,
Waveney Road, Southtown	Burnt Lane ,,
Alpha Road, ,,	Fen Street ,,
The Barracks, ,,	North Church Road ,, (2)
	River Side ,,

#### Those from Typhoid—

North Quay	Red Lion Alley
Albion Road	Foundry Walk
Row 54	The General Hospital
Prince's Road (2)	Laxon's Passage
King Street	Britannia Terrace
Alma Road	Cliff Hill, Gorleston
Providence Place, Cobholm	

#### Those from DIARRHŒA-

Blackfriars' Road (3)	Row 45
Victoria Street (2)	Row 26
Cobholm Island (5)	Row 8
South Beach	Row 54
Bowling Green Walk	Row 131
Nelson Road North	Row 109
George Street (2)	Row 117
Northumberland Place	Row 137 (3)
West Nettle Hill	Row 133
Maud Terrace	Row 118 (2)
St. Nicholas' Terrace	Row 3
Crown Road (2)	Row 134
Bessey's Buildings	Row 123

Row 99 Wellington Place Row 135 Apollo Garden Walk Row 88 Nursery Terrace St. Nicholas' Road (3) Row 107 Row 21 Tyrolean Square Middlegate Street (3) Stanley Road Preston's Yard Maddey's Terrace Nelson Road South St. Paul's Terrace Caister Road Garfield Terrace Jury Street North Quay Kent Place Foundry Walk Argyle Terrace Cemetery Road Dene Side Wellesley Road Friars' Lane Black's Hole Militia Depôt (2) Providence Place, Cobholm Workhouse (2) Louise Road St. Peter's Plain Tower Road Grosvenor Road South Quay Southtown Road Exmouth Road (2) Frank's Buildings, Southtown Trinity Place Brewer's Buildings Admiralty Road Marine Terrace, Gorleston Abysinnia Road Alma Road Lower Cliff Road Fox's Passage Blackwall Reach Pier Terrace, Regent Road Springfield Road

You will observe Measles, Scarlatina, and Typhoid Fever were very rife last year and caused many deaths, but numerous as these were, they form a very inadequate indication as to the extensive sickness which prevailed from these disorders. Undoubtedly isolation, with disinfection and cleansing, are the best means we have at present for combating the spread of infectious maladies, but the first of these means at least is not so fully appreciated as it ought to be. Your Infectious Diseases Hospital serves an excellent purpose in providing seclusion for those willing to avail themselves of it, and many patients are annually received there, but they have hitherto chiefly been persons in service in the town, or so circumstanced,

from poverty or otherwise, as to be without the comforts of a The Guardians of the Poor also have the use of the Hospital for infectious cases occurring amongst the paupers. As, however, infectious disease is not peculiar to the poor, it follows that consistency and urgency require that the necessary conveniences for isolation should be available for all Isolation at home is too often a dangerous fallacy, and it seems to me that ere long it will fall to the lot of Sanitary Authorities to provide suitable accommodation for persons of every grade. The class of patients I am now contemplating would pay for the use of apartments where themselves and attendants could be cared for and housed as if at home, and yet withal thoroughly isolated. In fact I have in view a sort of Sanitary Boarding House—a home from home-where everything should be bright and cheerful within and green and flowery without, so that seclusion may become largely divested of its tediousness and convalescence pleasantly encouraged.

Our Diarrheal Fatality last year was very high, more so than it has been for several years past. Nearly all of it occurred during the summer quarter, and in the persons of young children. The warmth and moisture of the summer weather are credited with having considerable influence upon bowel complaints, and possibly to a certain extent this may be true; but it would seem more reasonable to consider unwholesome ingesta the more blameable, and to direct our attention to securing the purity of the air, food, and water supplies of this town, rather than scolding the weather, which is beyond our control. However, as it is important to rightly estimate meteorological influences, I give below the chief facts as to temperature and rainfall, as well as the number of deaths from Diarrhea in this borough for each week during the time the intensity of the fatality lasted.

Observations	TEMPERATURE. (In degrees Fahrenheit)								RA	ALL,	DIARRIIG		
taken during	erved.	observed.	Averages for the week.			Averages for the week.    Averages for the week.   Aceumulated heat for the week   Aceumulated heat for the week   Aceumulated heat   Aceumulated			Rainy S.	1 the	e from for the k.	Deaths registed during week	
week ending	Highest observed.		Of highest each day.	Of lowest each day.	For whole of the day.	rence of age froi r the w	week (in day-degrees).		of )ay	Rainfall in week.	Difference from the mean for the week.	ending with the	
Monday.	High	Lowest	Of his each	Of le	For w the	Average from mean for the week.  Above the week.  Above the week.  420 F. Grand the week.  Below capable the week.  420 F. Grand the week.  Below capable the week.		Number I I Rainfa w Differe the mea		Diff the 1	Saturday.		
12th July 19th ,, 26th ,,	81 77 70	47 48 54	67·0 67·9 67·9	52·6 57·3	59·7 62·2	— 1·7	124 141	0 0 0	5 5 5	$0.94 \\ 1.62$	+0.45 $+0.33$ $+1.02$	24th ,, 31st ,,	0 4 0
2nd Aug. 9th ,, 16th ,, 23rd	67 76 69 67	47 44 48 51	63·7 68·0 65·4 64·6	52·4 53·7 53·7 54·3	60·4 59·2			0 0 0	5 2 5 3	$0.26 \\ 0.83$	+0.08 $-0.26$ $+0.35$ $+0.19$	14th ,, 21st ,,	$\begin{bmatrix} 0 \\ 5 \\ 7 \\ 4 \end{bmatrix}$
30th ,, 6th Sept.	74 74 71	50 55 47	68·4 68·1 68·3	55·3 59·3	61.5	+ 1.5	137 151	0 0	0 3 3		-0.62 $-0.38$	4th Sept.	17 15 10
13th ,, 20th ,, 27th ,,	72 63	53 47	63·9 60·9	56·1 51·3	59·8 55·9	+ 3.3	125 97	0	1 6	0.04	-0.70 $-0.43$	25th ,, 2nd Oct.	16
4th Oct. 11th ,,	71 63	47 43	64.6	51.9	58·1 56·1		113 99	0	0 3	0.18	-0·70 -0·51		6

If you will kindly refer to the list of localities in which Diarrhœa deaths occurred on pages 10 and 11, I think you cannot fail to notice how much the Rows, in the South District especially, and the second rate roads and streets throughout the borough, suffered. The inhabitants of these places are for the most part persons of the industrial classes, occupying small houses, no larger than they need for their own families, and in very many instances hardly sufficient for them. During August and September an enormous number of very ordinary visitors flocked into the town, filling up completely every small lodging available, and crowding into any household willing to receive them. A vast number of our visitors are not particular where they lodge so long as they get house-room cheap, and it so happens that the very districts in which the Diarrhea was most fatal were exactly the localities in which the most fearful overcrowding took place. I have heard of as many as

fourteen lodgers housed in a small cottage, together with the ordinary occupants, which, by the way, was a family quite sufficiently large for so small a tenement. The filth and refuse so many people must of necessity give rise to, poison the air and induce disease, and none more readily than Diarrhea. Another reference to pages 10 and 11 will, I think, also demonstrate the general immunity from the disease of that portion of the town stretching along the sea front, where many of the best residences, hotels, and all the first-class lodginghouses are situate. These residences are properly provided with w.c.'s and other necessaries, and although they were well filled with visitors during the season, they were not overcrowded, and the health of the inmates seems to have been vastly better than that of those in the humbler lodgings first alluded to. I would strongly advise you to make use of section 90 of the Public Health Act and frame a few reasonable regulations which householders must observe if they let apartments. No hardship would result to anyone, but a large amount of good might be secured to our juvenile population and our visitors' healths protected. In this latter connexion Sections 128 and 129 of the said Act are being better understood by many of the public, and in a noteable case last year were rigorously applied, to the discomfiture of a sea-side lodging-house keeper. The case alluded to did not occur in Yarmouth, but a similar one might do, for unless persons letting lodgings exercise the care for the healths of their visitors the law demands of them, 'tis very possible some of our townspeople may one day be rudely awakened to their liability in the matter.

Whooping Cough has been lurking about this district for a long time past, indeed for many years we have not been free from it. Last summer, however, it assumed epidemic proportions in Gorleston, and judging from the Registrar-

General's reports, the mortality wave seems to have rolled upon us from the South. Deaths are officially reported as occurring in the localities and quarters as under:—

REGISTRATION SUB-DISTRICTS.	QUARTERS OF 1886.						
	First.	Second.	Third.	Fourth.			
Kessingland Lowestoft Gorleston Yarmouth (Southern) Ditto (Northern)	1 10 4 —	2 7 1 —	$\begin{array}{c} -\frac{4}{14} \\ -\frac{14}{1} \end{array}$	- - 4 - 2			

The disease is so essentially one of infancy—only 1.4 per cent. of the deaths being above 5 years of age during the last decennium—that it is difficult for you as a public body to grapple with it. Were it not for the complications the disease gives rise to its mortality would be very much lighter. A child with Whooping Cough needs a considerable amount of care in the matter of clothing and feeding, for it is inattention to these things, in great measure, which places the patient in jeopardy of the Bronchitis or other concomitant malady which so often kills.

#### SANITARY WORK.

#### NUISANCE REMOVAL.

Total number of nuisances attended to by Inspector	546
Remedied by Inspector's notice only	257
Referred to the Town Clerk for formal orders	289
(a) To construct new drains, to repair and cleanse old	
ones, and to trap and cleanse cesspools, &c.	75
(b) To reconstruct and otherwise repair privies	64
(c) To concrete and otherwise repair back yards,	
passages, &c	49
(d) To cleanse, repair, or construct w.c.'s	24
(e) To fill up dead wells, remove privies, muck-	
bins, &c	17
(f) To whitewash and purify dwellings, cellars, &c.	15
(g) To close impure water wells	13
(h) To remove manure, discontinue keeping pigs, &c.	12
(i) To abate smoke nuisance	10
(j) To provide water supply, repair pumps, &c	9
(k) To close unwholesome dwellings, repair cellar	
flaps, &c., &c	9
(l) To put up water troughing	8
(m) To construct manure bins	8

Many matters of great importance to the public health have been considered by you during the past year, but that relating to our water supply stands out conspicuously, and claims first mention from me.

Of late years, by your action mainly, the water supplied by the Company has been largely substituted, as a town's supply, for that obtainable from the shallow polluted wells sunk in

the sandy soil upon which Yarmouth is built. From the first there were not wanting those who viewed the Company's water with suspicion, and asserted that drawn as it is directly from an open Broad or small lake in the hollow of the catchment basin of the Hundred of West Flegg, through which the natural drainage of the district passes, and to the surface of which the public have free access, that such water must of necessity be more or less contaminated with the surface washings of the arable lands and the drainage from the farms and villages around it, from the decaying vegetation, dead fish, putrid mud and deposit contained in it, and frequently from filth added to it by excursionists or fishing parties pleasuring on its surface. It was further urged that inasmuch as the water was only subject to filtration by the Company, the health of this borough depended upon the sufficiency of the filter-beds through which it passed.

So persistently have these averments been made, and the wholesomeness of the water called in question, that your anxiety openly expressed itself, in disregard of analyses put forward from time to time by the Company, by obtaining a complete and independent analysis from Mr. A. Wynter Blyth, with his candid, unbiassed opinion of the samples submitted to him, which your own official drew from taps in the town, and may be taken as a fair specimen of that usually supplied to the public. Apparently there was some good reason for suspecting befoulment, for Mr. Blyth certifies "the water could by efficient filtration be made a first-class water; but in its present state I must return it as one of the second class, that is, one of doubtful purity." An opinion such as this, from first-class authority, naturally gave you great concern, and you have been seriously considering whether it would not be better to possess yourselves of the public water supply of this borough rather than any longer allow a matter, so

essential to the public health, to remain in the hands of private individuals, who, however public spirited they may be, clearly cannot altogether ignore their own pecuniary interests, or earry the weight for the public good a Municipal Corporation can.

All the matters, affecting the purity of the Company's water, recited in the foregoing pages are still under your consideration, and I am sure you will carefully deliberate upon them. You cannot possibly have a weightier question before you, and should you ultimately determine to purchase the Water Works, as I hope you will, I feel persuaded good water in great quantity is to be obtained from the neighbourhood of the Broads, for, if necessary, the chalk strata is only about 600 feet beneath and could be easily tapped; but should you conclude to leave the Works with the Company, some efficient steps should be taken to ensure a purer supply.

Public attention has recently been particularly drawn to the utility of the "Baths and Washhouses Act," and their adoption by the Council strongly urged by many influential residents anxious to erect the necessary buildings as a Victoria Jubilee Memorial. The need for such excellent sanitary appliances was generally admitted, but it was thought rather more desirable that, inasmuch as the Baths and Washhouses could be procured by means of the Sanitary rate, they should be so obtained, and the voluntary offerings of the people applied to the re-building of the General Hospital. I am glad the scheme was mooted and found so much favour, and would advise you to carry it into effect. In all the towns where public Baths and Washhouses have been provided, they have proved an inestimable boon to the poor people, whose scanty accommodation at home for bathing or washing offer so little

inducement to be clean and wholesome either in their persons, clothes, or dwellings.

Equally welcome would they be in Yarmouth, where many of the houses in the Rows and other crowded parts of the town have no outdoor drying space at all, unless, indeed, the folk sling their clothes across the row or street to the house on the opposite side. But although this is done sometimes, far more frequently the wet clothes are hung about the rooms in which the people live or sleep, and the reek from them not only make the house damp and offensive, but is the direct cause of much illness, more easily avoided than cured if the washing was not done at home.

Of the many institutions created by the Acts, none are better for construction, arrangement, and general administration than the St. Marylebone Baths and Washhouses. They are now in the 38th year of their existence, are self-supporting, and paying something off their original cost. The success which has attended them is in a large degree due to the able management of the late Mr. G. S. Foot, whose sagacious advice may be well worth recording here:—"There are two important points to be observed to promote success,—first, to select a site in a neighbourhood where you will get a large proportion of first-class bathers, and second, to make good swimming baths. These two points are vital."

In Gorleston the need of a Public Mortuary is unfortunately often felt. Bodies brought in from sea, or taken out of the river, are frequently in a state of decomposition, which prohibit their admission to any habitation, and sometimes their offensiveness is so much as to almost forbid them shelter even in a warehouse. Should any examination as to cause of death be necessary, it is hardly possible to make such in a

badly-lighted building with no convenience for the purpose. In cases of judicial enquiry issues of the utmost importance may attach to a careful and correct inspection, and every facility for making a satisfactory post-mortem should be provided. In Yarmouth, bodies taken out of the water or from ship-board are generally conveyed to the Workhouse; but in Gorleston there is positively no public accommodation whatever, and I strongly advise that a properly appointed Mortuary and Inquest Room be built in some convenient spot in that parish. This matter is really urgent, as the Coroner, Jurymen, and Medical witnesses can testify.

The sea-water works you constructed a year ago for flushing the sewers and watering the roads, continue to be a great success. In both directious the water answers its purpose admirably, besides being far more economical than the fresh water, for which you had to pay heavily. The saline particles left upon the roads after watering with salt water ensures a longer continuance of a moist surface than fresh water could command, and their improved condition as to firmness of surface and freedom from dust is patent to everyone. In the sewers the sea water fulfils all the fresh water formerly accomplished, and apparently does more in the way of deodourizing them, for the complaints as to their offensiveness are less numerous than when fresh water was used, and generally comes from a locality remote from the flushing power of the sea water. As the sewers are extended, so likewise are the sea water pipes, and wherever opportunity presents an automatic flushing tank is placed in connexion with both, so as to secure continual flushing of the former. Tall iron pipes running up by the sides of buildings are much preferred by the inhabitants to the surface ventilators, and wherever practicable one is erected; all new sewers are provided with them.

Of late years quite a new departure in yachting has sprung up in Norfolk. For the accommodation of those not having boats of their own, ordinary trading wherries are fitted up as "house-boats" with every convenience for comfortable residence afloat, and let out to gentle folks who, with their families, spend many days or weeks roaming hither and thither on the Norfolk rivers and broads. The majority of these moveable dwellings are dismantled in the Autumn and the wherries return to their normal carrying work during the Winter and Spring months. At present there is no surety that these dwellings are arranged with the best consideration for health, or that the drinking water is as good as it ought to be, the lake or river water frequently being used as such. It seems exceedingly desirable that all dwellings, whether moveable or stationary, afloat or ashore, should have some sanitary supervision and that their water supply should be from unquestionable sources. Inasmuch as you already have sanitary duties entrusted to you under the Canal Boats Act over much of the waters traversed by these floating habitations, it seems only proper you should have within your perview the vessels here noticed, which apparently ought to come under legal enactment of the same intent as the clauses in the Public Health Act relating to lodging houses.

Thanking you for the attentive consideration you have given to the counsel and advice I have had the honor of tendering you during the past year,

I am, Gentlemen,

Yours obediently,

JOHN BATELY, M.D.,

Medical Officer of Health.

